## **REMARKS**

Claims 1-10 are currently pending in this application.

Claims 1 and 8 are in independent format.

Claims 1-2, 4-5 and 8 have been amended while new claims 11-16 have been added with Claim 11 being independent.

## In The Specification

The specification has been amended to correct informalities.

Before discussing the Office Action, Applicant first would like to express his appreciation to the Examiner for the courtesy of the personal interview held on September 8, 2005, and for the opportunity to display Applicant's system, to discuss its unique features and to discuss the relevance of the cited art as applied to his invention.

## Rejection of Claims 1-10 Under 35 U.S.C. § 103(a)

The rejections of Claims 1, 2, 3, 5, 7 and 8 under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Sullivan* (U.S. Patent Publication #2003/0035386) and rejection of Claims 4, 6, 9 and 10 under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Sullivan* in view of *Amini et al.* (U.S. patent #6,698,021) are respectfully traversed. Applicant disagrees and submits that the Examiner has not provided a prima facie case of obviousness.

Under M.P.E.P. § 2143, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine

reference teachings. Second, there must be a reasonable expectation for success. Finally, the prior art reference (or references when combined) must teach or suggest all the claimed limitations.

If the prior art references require some modification in order to meet the claimed invention, or require some modification in order to be properly combined with another reference, and such modification destroys the purpose or function of the invention disclosed in the <u>reference</u>, one of ordinary skill in the art cannot be said to have found a reason to make the claimed invention. See: M.P.E.P. § 2143.01. (Emphasis added). In other words, the proposed modification cannot render the prior art unsatisfactory for its intended purpose. Additionally, the Applicant submits that it is improper to combine the references where the references teach away from their combination. (See: M.P.E.P. § 2145 X.D.2). Furthermore, the Applicant submits that it is improper to combine the reference where any combination requires a substantial reconstruction or redesign of the references to arrive at the claimed invention

With regard to the *Sullivan* reference and notwithstanding the document entitled "Declaration Of Richard Weinstein Under 37 C.F.R. 1.131" (filed concurrently herewith), the Applicant submits the following arguments without acquiescing the impropriety of the *Sullivan* reference as prior art. The *Sullivan* reference teaches a very different system than the claimed system of the present application ("the present system"). The *Sullivan* reference teaches a method of utilizing satellite feeds and a method of utilizing video production equipment to commercially offer video from public or private events. The *Sullivan* reference

teaches "[t]he improved apparatus and method also provide high speed Internet access anywhere..." and "[t]he control processor converts the live media content..." (See: Paragraph 8). As such, the Sullivan reference teaches transferring video data over the public Internet. In contrast, the present system comprises a platform for surveillance of events in a secure IP format.

Accordingly, the *Sullivan* reference teaches using the public Internet as a transport path. The *Sullivan* reference identifies the transporting and viewing of the video images over a public-accessible internet service. This approach utilizes non-secured, non-encrypted systems for the transmission and viewing of the video data.

The transport path of the present system comprises a private radio frequency (RF) microwave network (intranet), which cannot be viewed by the "public" on the Internet. The present system further comprises a secure transport path, via AES (NIST/NSA) approved encryption technology, and sent along the microwave transmission. The AES encryption approach prohibits unauthorized users from viewing and altering the video data.

The *Sullivan* reference provides for viewing of a remote "live event" to "webcast viewers" from either a webcaster ISP or a direct satellite "teleport" type feed(s), i.e. a public Internet webcaster or a satellite. (*See*: Paragraph 64). As noted, the *Sullivan* reference specifically utilizes satellite facilities. As taught in the *Sullivan* reference, reference #'s 108, 110, 112 and 116 disclose the transmission path or transport means, which includes an uplink system, a communication satellite, a teleport facility and a webcast system respectively.

(See: Paragraphs 65-71). The *Sullivan* reference identifies the use of a unsecured public satellite communications link to relay video data from the "Live Event" (Reference #102) via an Ethernet-supplied Uplink (Reference #108), though the satellite and Associated Ground Receiving Station(s) and Routers (References #110, #112 and #116 respectively) as the sole communication path. The use of the public satellite communications system allows anyone within the public sector with the proper receiving equipment to receive and view this video data.

ln sharp contrast. Mr. Weinstein's system utilizes private, encrypted/secure, point to point or point to multipoint RF microwave transport means to send/receive the video data. The present system allows for many cameras to be used in a point to multipoint environment, which eliminates the need for many, multiple hops to view multiple cameras. Unlike current analog technology. Applicant's system enables video data to be sent from a location to a host location and simultaneously viewed one or multiple viewers. The video feed is over a secure, digital and IP formatted system (not the public Internet). This send/receive approach eliminates the potential for the video data being compromised, which can easily occur with a system employing the teachings of the Sullivan reference.

The *Sullivan* reference teaches video acquisition of live events using TV cameras and recording equipment. A production switcher (reference # 104) common to sports or media events then cues an event feed to the satellite portable uplink station (reference # 106 and # 108) to broadcast the event-based

paragraph 62). In reviewing the teachings of the Sullivan video. (See: reference, it is apparent that the video data transmission system was developed for commercial applications. Specifically, those commercial applications are associated with the transmission of video feeds from sporting events such as professional and collegiate sports event, and for other commercial events such as award ceremonies, musical events, etc. The Sullivan reference's use of the term "Live Event" (reference #102) describes the source of the video data input (standard-type video cameras) using commercial terminology not commonly associated with covert systems. Combined with the physical use of the video production switcher and encoder hardware (References # 104 & # 106 respectively), both widely used commercial-oriented products, the Sullivan reference is clearly a commercially-oriented system designed to relay commercial-oriented video data to the general public. This is further confirmed by the Sullivan reference's use of the Webcaster ISP system (reference # 116), another typical commercial-usage application.

Applicant's system acquires surveillance data (relating to defense and investigatory video) via covert, miniature cameras. The cameras are small and compact in order to be easily concealable. Furthermore, the cameras operate at low current consumption for operating at long time periods with little or no power supply. The cameras of the present system link to a video codec while the wireless microwave RF transceivers transport the video data on an encrypted basis to the remote viewer desktop. The person or entity effectuating the surveillance views the video data selectively. The present system is not

designed for video data transmission to the general public. The present system is uniquely specific to video transmission by small, highly sophisticated and unique, high-resolution video cameras covering several bandwidths (visible, infrared and color-palate infrared) that are of a covert nature, wherein the covert nature necessitates the security of these video signals to avoid their being compromised. The present system's approach of linking these specialized cameras to a video codec system and then maintaining the security of these video signals by encrypting them and sending them over the RF wireless microwave system ensures that these video signals will not be received and compromised by someone not authorized to view them.

The *Sullivan* reference teaches a Content Delivery Network. Additionally, the *Sullivan* reference teaches the use of a "...novel TCP proxy process" to adjust for propagation delays. (*See*: Abstract). The present system is generally utilized less than 100 miles and requires only the direct transmission of video feed to the end viewing point.

Furthermore, the *Sullivan* reference teaches mass transportation of unsecured video data signals from commercial-type events over a satellite-based data transmission system for the final viewing by the general public of these video data transmissions. The type of video data transmission equipment used, the fact that these video signals are neither secured (use of public internet) nor encrypted validate this general public viewing.

The present system is unique and outside the teachings of the *Sullivan* reference as the present system uses an RF wireless microwave system to

transmit secure and encrypted data to either a single or multiple point location and subsequent distribution via a secure intranet. This is accomplished to support non-commercial usage applications, and the need to eliminate potential reception and/or compromise of specific covert camera operations utilized within the Department of Defense.

Dependent claims, by their nature, include all of the limitations of the parent independent claim and any intervening claims from which they depend. Claims 2-7 and 9-10 each depend either directly or indirectly from independent Claims 1 and 8, and accordingly, are believed allowable under 35 U.S.C. § 103 (a) over the *Sullivan* and *Amini* references for at least the same reasons as independent Claims 1 and 8. Notwithstanding that dependent claims 4, 6, 9 and 10 depend from allowable Claims 1 and 8, the Applicant submits the following arguments with respect to the *Amini* reference.

The *Amini* reference teaches a central archival registry of video data using remote sites (reference # 300), a viewing site (reference # 320) and an off site storage (reference # 330), wherein public/private network(s) provide for viewing of the video data. This reference simply refers to the viewing of security cameras (#312), on an archived and recorded database, i.e. "after the fact." In other words, the *Amini* reference merely teaches a method for the remote viewing of a security camera. Additionally, this reference utilizes, dedicated and non-dedicated networks (reference nos. 340 and 350) to access the video.

In contrast, Mr. Weinstein's system views events on a real time basis.

The present system is a true "real-time" video data viewing system that allows

the end-user to conduct true real-time video surveillance of multiple security camera systems. This real-time video viewing capability is a critical requirement for specific monitoring by Department of Defense Security Systems to allow the proper threat identification and response in a required real-time environment. The present system comprises remote wireless viewing of surveillance video over encrypted and dedicated wireless microwave networks. Thus, the video surveillance of the present system is portable or fixed, while achieving connectivity over encrypted wireless networks. The present system allows for immediate (as opposed to the delayed viewing taught by *Amini*) viewing of video in criminal, governmental, and institutional situations for immediate reaction.

Furthermore, the present system allows for the remote panning, tilting and zooming of cameras to assess the immediate threats of such situations while acquiring the surveillance video of the situation. Additionally, the present system provides remote sensors to interact with the video and alert, in "real time", the user through the wireless network that a breach of security or some other event has occurred under the surveillance. As such, the present system generates an immediate reaction to the event.

In the Abstract, the *Amini* reference discloses "...enabling real-time off-site video image storage." This statement appears to be in conflict and needs to be further considered. "Off-site video image storage" refers to images stored of an event that has occurred some time in the past. "Real-time" means an event that has just happened or is occurring at the present time. The conflict simply infers that someone can view video images of past events in a "real-time" mode off the

video server (reference nos. 332 and 334). The images discussed in the *Amini* reference comprise images of the past. Accordingly, the storage system and subsequent image database (reference # 334) pertain to past events. In contrast, the present system produces real-time and instantaneous remote viewing of video images at remote viewing sites as the video images occur.

Additionally, the Abstract of *Amini* discloses "[v]ideo images received by the off-site server are produced for <u>live viewing and/or archived in an image</u> <u>database</u>." (Emphasis added). As such, the *Amini* reference teaches viewing video footage after the fact. The user then remotely views the video "database" (reference # 334). As previously noted, the present system produces real-time, actionable content.

With respect to reference # 340 and # 350 of the Amini reference, the use of a private network (undefined as of type, so assumed standard phone-line based) and public network are identified as the modes of video data transmission to the data archiving and data viewing locations, respectively. There is no RF reference other indication wireless microwave or that an transmission/reception approach is utilized, nor is there any reference or other indication that any specific secure network utilizing encryption algorithms is employed. As a result, the video data archived and retrieved for viewing is sent over public network communication systems, and is viewable by anyone in the public domain; whether by officially requesting this video data or by illegally obtaining access to the archived video data.

Mr. Weisnstein's system utilizes a secure and encrypted RF wireless microwave system that is <u>not</u> part of a public network. This design approach precludes any parties that are not intended to receive this video data, which is <u>not</u> archived but provided in real-time, from accessing it.

With respect to reference # 330 of the *Amini* reference, the image database (reference # 334) and processor (reference # 332) are promoted as being located in a "fixed" site that has hard-wired connections for data archiving and retrieval between the offsite storage site (reference # 330) and the client site (reference # 310) and viewing site (reference # 320) respectively. There is no identification for any mobile/portable system capability, nor is there any identification for any data transmission medium other that hard-wired land-lines associated with either the private or public networks (reference # 340 and # 350 respectively).

The present system utilizes a wireless RF microwave system to transmit data from the security cameras to a wireless RF receiving system for the real-time viewing of this video data. In the present system, there are no hard-wire land-line limitations that are resident in the *Amini* reference. This limitation absence allows both the surveillance cameras supplying the video signal outputs, the wireless RF transmitting and receiving system, and the viewing of these transmitted video signals to be in either a fixed or mobile platform.

With respect to reference # 310, "Client Site", and the associated subsystems; Reference # 312, "Security Cameras", and Reference # 314 "Camera Server", the sole function of this client site is to capture the video

signals from the security cameras and subsequently send these captured video signals via the private network data link (reference # 340) for archiving at the off site storage site, reference # 330. There is <u>no</u> identification of any control functions associated with the security cameras, such as those controlling a "Pan, Tilt & Zoom" camera, or switching outputs for an infrared camera between "Black Hot" or "Black Cold" or "Color Palate" video data output functions. The *Amini* reference, therefore, teaches a "one way" system.

Applicant's system, in addition to the real-time processing and data transmission of video data, supports the real-time control of security cameras. Examples of real-time control functions of the present system are the movement of the pan and tilt functions for a +/- 360 degree field of view in azimuth and +/- 90 degree field of view in elevation (i.e. four degrees of freedom); changing the lens "zoom" for target image recognition at varying distances and the selection of the type and color palate for Infrared cameras.

The *Amini* reference is designed around a non-real-time video data archival system. The teachings of the *Amini* reference system can only receive video data outputs. As such, the *Amini* reference cannot perform the various internal control functions available on infrared pan, tilt & zoom camera systems. These video data signals that are archived are viewed in non-real time by the end-user of the *Amini* reference, and are therefore <u>not</u> suitable for applications that require true real-time video viewing, continuous real-time control of the camera(s) providing the video data outputs. The *Amini* reference is hard wired

using a land-line data transmission interface, with the off-site storage site being regulated to a fixed location.

The present system <u>is</u> a real-time video viewing system that can also command and control in real-time the internal control functions available on infrared pan, tilt and zoom camera systems. The present system usage of a wireless RF microwave system for both data transmission and receiving permits any and all of the present system's components (cameras, wireless RF microwave transmission, receiving systems, and viewing systems) to be either in fixed or mobile platforms.

In summary, the *Amini* reference teaches that a user remotely views off-site and archived video of past events. The present system provides for real-time remote wireless viewing of actual video at surveillance sites. This real time surveillance is not stored for later view/delayed response (as opposed to the teachings of the *Amini* reference); but instead, the present system allows for an immediate response or reaction to criminal, terrorist, insurgent or other surveillance activities as they are occurring. Furthermore, the present system may be set-up in a fixed or portable environment to accommodate needs beyond the landline leased telephone network (reference nos. 340 and 350) as taught by the *Amini* reference.

New claims 11-15 further recite the limitations of the covert, secure and private transmission of data over microwave frequencies.

In addition to the unique features of the Applicant' invention and the previously mentioned differences between the Applicant's invention and the cited

references, Mr. Weinstein further submits that his invention satisfies both a long felt need in the industry while obtaining commercial success in the industry. (See Applicant's affidavit and that of Randolph Johnson filed concurrently herewith). Based on the above-mentioned differences between the present system and the *Sullivan* and *Amini* references, the Applicant submits that the Examiner has not established a prima facie case of obviousness. Since the present system teaches a private network with direct transmission from imaging to end viewing, one of ordinary skill in the art would not be motivated to modify or combine the cited references. Any modification of the references would destroy the function of the present system and in the very least any modification would require a substantial reconstruction of the cited references. Furthermore, since the references teach a public transmission of data via a satellite network, the references do not teach or suggest the claim limitations of the present system.

Respectfully submitted,

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